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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/575,188	05/23/2000	Kia Silverbrook	NPT004US	9208

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SILVERBROOK RESEARCH PTY LTD  
393 DARLING STREET  
BALMAIN, 2041  
AUSTRALIA

EXAMINER

LEE, SEUNG H

ART UNIT PAPER NUMBER

2876

DATE MAILED: 12/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/575,188

Applicant(s)

SILVERBROOK ET AL.

Examiner

Seung H Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 31 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 2-22, 24-61, 63-112, 114-166 and 169-178 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2-22, 24-61, 63-112, 114-166 and 169-178 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 31 October 2003 has been entered.

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### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 2-6, 25, 30 -38, 40-43, 45-51, 61, 63-67, 70-74, 81, 82, 88-93, 107, 114, 115, 119-127, 129-132, 134-140, 143-155, 158-163, 170, 171, and 177-178 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman et al. (US 6,330,976)(hereinafter referred to as 'Dymetman/Klotz, Jr.') in view of Klotz, Jr. (US 5,459,307).

Dymetman teaches a method of enabling user interaction with computer software running in a computer system using an interface surface (102) containing information such as a page identifier (pid) and a location identifier (loc) which are serves as an interactive elements wherein the page identifier and the location identifier are printed

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substantially simultaneously onto a substrate (Fig. 6B), relating to the computer software and including coded data indicative of one interactive element such as a hyperlink to open web site a sensing device or detection device (502) senses indicating data indicative of on interactive element and generates movement data based on the page identifier and the location identifier indicative of the sensing device's movement onto interface surface, receiving the indicating data (pid) and the movement data (loc) from the sensing device, identifying the interactive element to identify an action (e.g. opening a web site) in which serves as effecting an operation of the computer software by sending data such as URL information to computer software, operating the computer software in reliance on the movement data, and in accordance with instructions associated with one interactive element, retaining or containing retrievable records (pid and loc) of each interface surface which is usable to retrieve identity contained in its associated coded data (see Fig. 12; col. 9, line 56- col. 10, line 8), a tag (206) is orientation maker, the surface is defined by laminar substrate, and the tag is located predetermined position of each cell (202), and the tags are disposed within a tessellated pattern and interlock with each other cell to cover the surface with same rectangular shape, a first set of markings or identity data (208) and a second set of markings or identity data (210) are featured on all the cell in format of redundancy of information represented symmetrically and take form of a dot having a two possible value, tags are printed using a ink printer to print using infrared spectrum or other means to print visibly or invisibly to human eyes containing information regarding particular a digital page or

other detailed data relating to information printed on the page (see Figs. 3, 5A, 5B, 6B; col. 12, lines 30-56; col. 13, lines 1-57).

However, Dymetman fairly suggest that the interface containing human readable information.

Klotz, Jr. teaches a creating document or page (10) comprising a machine readable area such as a file storage flag (12), a label (13), a directory (14), and a files area (15), and the page also comprises human readable areas such as a label, and a directory in which is not shown in the figures (see Figs. 1; col. 2, line 64- col. 3, line 4; col. 1-19)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Klotz, Jr. to the teachings of Dymetman/Klotz, Jr. in order to provide an convenience since operator/user also can read information stored on the interface by reading labels on the page, and therefore an obvious expedient.

4. Claims 7-21, 76-80, 84-87, 94-106, 108-109, 165-167, and 173-176 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman as modified by Klotz, Jr. as applied to claims 2, 88, and 89 above, and further in view of Wolff et al (GB 2,306,669, of record)(hereinafter referred to as 'Wolff').

The teachings of Dymetman/Klotz, Jr. have been discussed above.

In addition to the teachings of Dymetman/Klotz, Jr. as discussed above, Dymetman also teaches that encoding of information into single zone and/or encoding

marked information onto substrate within limited area of the interface surface (see Figs. 5-7; col. 13, line 1- col. 14, line 54).

However, Dymetman/Klotz, Jr. fail to teach or fairly suggest that the interactive elements are checkbox, a text field, a signature, and drawing.

Wolff teaches the sensing device (91) to acknowledge content of the check box, the text fields, the signature, and drawing, then sending acknowledged information to the computer system (94, 96) (see Figs. 1-6; page, 6, line 2-page 8, line 5; page 16, line 21- page 19, line 2), a position sensor (210) including a gyroscope, and an accelerometers to measure position and acceleration based on orthogonal component (e.g., x, y, and z axes), and ball-point (116) to draw the user input (see Figs. 6-11; page 17, line 5- page 23, line 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Wolff to the teachings of Dymetman/Klotz, Jr. in order to provide a user-friendly system means the sensing device is recognizing or acknowledging additional elements on the paper such as the check boxes, text fields, signatures, and drawings for reading-in of information automatically for computer software. Moreover, such modification would improve the authentication and/or verification of the documents scanned using verifying/authenticating signature using the spatial location and/or pressure of the signature. Furthermore, it would have been an obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well-known x, y, and z axes of coordination system to measure the acceleration and position as taught by Wolff to the

teachings of Dymetman/Klotz, Jr./Klotz, Jr. in order to increase the precise measurement of the acceleration and location of the sensing device of Dymetman/Klotz, Jr., and therefore an obvious expedient.

Although, Dymetman/Klotz, Jr. as modified by Wolff fairly suggest that the 10 millimeter sub-region includes information to identify the region, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify limited area of the interface of substrate to encode information onto substrate as taught by Dymetman/Klotz, Jr. to identify the region, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980), failing to provide any unexpected results.

5. Claims 27, 52-60, 68, 110, 111, 141, 142, 156, and 157 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman as modified by Klotz, Jr. as applied to claims 2, 88, and 89 above, and further in view of Dougherty et al (US 6,076,734, of record)(hereinafter referred to as 'Dougherty').

The teachings of Dymetman/Klotz, Jr. have been discussed above.

Although, Dymetman/Klotz, Jr. teach the method and system to enable interaction with interface surface containing identification data thereon, they fail to teach or fairly suggest that the sensing device contains identification means.

However, Dougherty teaches the sensor (12) contains the identification code to identify and monitor the sensor and each and every user, encoding or disposing the

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information in arcuate bands around a central region using color printer capable of producing color images with CMYK type (see Figs. 7-8; col. 10, line 33- col. 13, line 27)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Dougherty to the teachings of Dymetman/Klotz, Jr. in order to provide an improve an security means by monitoring and/or tracking of the each and every sensing device based on the identification number stored in the sensing device with or without user's identification. Moreover, such modification would have been an obvious to one of ordinary skill in the art at the time the invention was made to incorporate the well-known CMYK type of color printing as taught by Dougherty to the teachings of Dymetman/Klotz, Jr. in order print the image on a substrate in color, and therefore an obvious expedient.

6. Claims 39, 44, 69,83, 128, 133, and 172 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman as modified by Klotz, Jr. as applied to claims 2, 88, and 89 above, and further in view of Sekendur (US 5,477,012, of record).

The teachings of Dymetman/Klotz, Jr. have been discussed above.

Although, Dymetman/Klotz, Jr. teach the method and system to enable interaction with interface surface containing identification data thereon, they fail to teach or fairly suggest that the tags are disposed stochastically and the common feature is ring shape.

However, Sekendur teaches the ring shaped dot (2) is disposed onto the surface (1) stochastically (see Figs. 1, and 2; col. col. 4, lines 28-41).



It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sekendur to the teachings of Dymetman/Klotz, Jr. in order to provide an improved and an enhanced means each dot is divided into three concentric circles partitioned into quadrants, center circle, outer circle, and rings to store/present coordination information of the coded surface, and therefore an obvious expedient.

7. Claims 29 and 118 are rejected under 35 U.S.C. 103(a) as being unpatentable  
over Dymetman as modified by Klotz, Jr. as applied to claims 2, 88, and 89 above, and further in view of Mayer et al. (US 4,932,679, of record)(hereinafter referred to as 'Mayer').

The teachings of Dymetman/Klotz, Jr. have been discussed above.

Although, Dymetman/Klotz, Jr. teach the method and system to enable interaction with interface surface containing identification data thereon and printing of interface, they fail to teach or fairly suggest that the interface is printed on multiple pages and binding of the pages.

However, Mayer teaches the printing of multiple pages and binding of the pages (see Figs. 1-4; col. 1, line 59- col. 2, line 61).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Mayer to the teachings of Dymetman/Klotz, Jr. in order to provide an improved means by printing and binding the

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multiple page for oversized document and/or image, and therefore an obvious expedient.

8. Claims 22, 24, 28, 112, and 116 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman as modified by Klotz, Jr. as applied to claims 2, 88, and 89 above, and further in view of Cass (US 5,692,073, of record),

The teachings of Dymetman/Klotz, Jr. have been discussed above.

Although, Dymetman/Klotz, Jr. teach the method and system to enable interaction with interface surface containing identification data thereon and printing of interface, they fail to teach or fairly suggest that the printing the interface surface on demand without using display

However, Cass teaches that printing the content on the interface surface (e.g., the web site) from received the information regarding particular web site in which users submitted or faxed to host computer with indicating appropriate hyperlink on the substrate to retrieve information from the indicated web site using fax machine in which does not equip with display device, and the printout substrate (1000) prior to user for using the sensing device for reading information/data from the substrate (see Fig. 20; col. 16, lines 42-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Cass to the teachings of Dymetman/Klotz, Jr. in order to send and receive the information from the website without using monitor. Moreover, such modification would provide accessibility of the

website from the remote location wherein the Internet connection is inaccessible using popular telephone lines to retrieve information using the fax machine as taught by Cass, and therefore an obvious expedient.

9. Claims 26, and 117 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dymetman as modified by Klotz, Jr. as applied to claims 2, 88, and 89 above, and further in view of Tseng et al (US 6,308,207, of record)(hereinafter referred to as 'Tseng').

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The teachings of Dymetman/Klotz, Jr. have been discussed above.

Although, Dymetman/Klotz, Jr. teach the method and system to enable interaction with interface surface containing identification data thereon and printing of interface, they fail to teach or fairly suggest that the distributing the interfaces using a mixture of multicast and PointCast communications protocols.

However, Tseng teaches that the multicast or PointCast communication protocol is used to send message over the networks (see col. 5, line 35- col. 6, line 28).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to adapt the well-known multicast and/or PointCast communication protocol as taught by Tseng to the sensing device of Dymetman/Klotz, Jr. in order to send and receive the scanned/read-in information between the sensing device and host system, and therefore an obvious expedient.

### ***Response to Arguments***

10. Applicant's arguments filed 21 August 2030 have been fully considered but they are not persuasive.

In response to applicant's argument that "*....Dymetman discloses two type of information.....the coded data must logically be the squares surrounding the page identifier....*" (see page 25, line 15), the Examiner respectfully provide Klotz, Jr. reference wherein Klotz, Jr. teaches a document including a machine-readable code and a human-readable code on same paper or page as discussed in paragraph 3 above.

### ***Conclusion***

Any inquiry concerning this communication or earlier communication from the examiner should be directed to Seung H. Lee whose telephone number is (703) 308-5894, and new telephone number (571) 272-2401 will be effective on 15 January 2004. The examiner can normally be reached on Monday to Friday from 7:30 AM to 4:00 PM.


If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael G. Lee, can be reached on (703) 305-3503. The fax-phone number for this group is (703) 872-9306.


Communications via Internet e-mail regarding this application, other than those under 35 U.S.C. 132 or which otherwise require a signature, may be used by the applicant and should be addressed to [seung.lee@uspto.gov].

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*All Internet e-mail communications will be made of record in the application file. PTO employees do not engage in Internet communications where there exists a possibility that sensitive information could be identified or exchanged unless the record includes a properly signed express waiver of the confidentiality requirements of 35 U.S.C. 122. This is more clearly set forth in the Interim Internet Usage Policy published in the Official Gazette of the Patent and Trademark on February 25, 1997 at 1195 OG 89.*

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.

  
Seung H. Lee  
Art Unit 2876  
December 23, 2003

  
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